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LIZARD HUNTS ON THE NORTH COAST OF PERU

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In many of the irrigated valleys on the desert coast of northern Peru there lives a little reptile which has not received the attention it justly deserves in the scientific literature, particularly when one considers the important role it has played in the economy of the people who have inhabited these regions since pre-Columbian times. Even today one cannot remain long in most of the north coast valleys of Peru, such as Moche, Virú, and Chao, without becoming acquainted with *cañanes*, which are small lizards, highly prized for their delicate flavor, their nutritive qualities, and their reputed aphrodisiacal powers. The thought of eating such lizards may seem strange and unappetizing to most of us, but they have been hunted and relished in these regions since Mochica times at least, perhaps even much earlier. In any case, the custom of hunting lizards for food still persists on the north coast of Peru. During the course of an anthropological study of the Virú Valley in 1947, my colleagues and I had the good (or bad, as the taste may be) fortune to eat them many times and even to attend a typical *cañán* hunt. Thus, what we have to say about these lizards derives largely from first-hand information and observation.

This study was carried out under the auspices of the Institute of Social Anthropology, Smithsonian Institution. I am indebted to my Peruvian colleagues, Dr. Jorge C. Muelle, Director of the National Museum in Lima, and Dr. Humberto Gherzi B., Instituto de Estudios Etnológicos, Lima, for collaboration in the field; to Señor A. Guillén, photographer, Museo de Historia, Lima, for photographs of the lizard hunt and of the Mochica pots containing representations of the lizards; to Dr. Doris Cochran, Curator of Reptiles, United States National Museum, and the late Karl P.

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Schmidt, Curator Emeritus, Department of Zoology, Chicago Natural History Museum, for zoological identification and description; to Mr. Tom Savage, undergraduate student at Cornell, for a preliminary search of the literature on lizards for identification purposes. To a Viruñero, Señor Carlos Zanelli, goes most credit of all; he organized the lizard hunt upon which this description is based.

Cañanes are strange little reptiles that live in pairs. They belong to the genus *Dicrodon*, of the family Teidae, which resembles other American racerunners of the genera *Ameiva* and *Cnemidophorus*. The Chao Valley lizards prove to represent a form hitherto undescribed. It has been named *Dicrodon holmbergi* by Dr. Schmidt (Schmidt, 1957, p. 66). These lizards dig their holes in the desert sand around clusters of the *guarango* tree (*Prosopis juliflora*)—called algarrobo in Virú—the fruits of which constitute their sole means of subsistence. They are not gregarious, but hundreds of pairs of them make their homes around nourishing stands of algarrobo. The full-grown males are bluish in color and attain an over-all length of about 20 inches; the females, more brownish in color, seldom grow to three-fourths this length. Both males and females have speckled backs, and most of their length consists of tail. Viruñeros claim that *cañanes* are ovoviviparous.

Cañanes spend most of their lives underground. Here they hibernate during the winter (April to November); here they raise their young. Only when the summer months appear do heat and hunger drive them from their holes and then only for a few hours on days when the sun is shining. (We found out by experiment that *cañanes* cannot live long in the sun; they die within an hour or so if placed directly in it.) On cloudy days they prefer to remain indoors. When the weather is warm, however, they stick their heads out of their holes at about 9 o'clock in the morning, head for the nearest algarrobo, and begin to feed on the green fruits. Since few tender ones are to be found on the ground, the *cañanes* usually climb the spiny trees. In this way they not only reach the more luscious pods, but they also avoid attacks by larger lizards locally known as iguanas, and by foxes, vultures, and hawks, which sometimes kill them when they are caught in the open. After eating for a few hours, the *cañanes* return to their holes, sometimes taking with them pods which are stored for winter. After several months of such feeding, they become fat, and in April, when the cloudy days of winter appear, they retire to their holes to sleep until the warm days of November roll around again. *Cañanes* never taste of water.

FIG. 93. Mochica jar with modeled lizards probably depicting *cañanes* in anthropomorphic form. From collection of the National Museum, Lima.

While lizards are diversely and extensively portrayed on Mochica pottery (see figs. 93 and 94), archaeologists have not yet called much attention to their probable importance in the diet of the ancient Peruvians.[1] To be sure, it is impossible to mistake what appear to be representations of *cañanes* for anything but lizards but it has not been emphasized that many of the representations may portray a specific type of lizard—the *cañán*—which probably constituted an important element in the food supply. Figure 94, for instance, shows a Mochica representation of a lizard associated exclusively with the pod-like fruit of the algarrobo tree. It is possible that a careful analysis of Mochica pottery might even yield representations of the traps in which *cañanes* were hunted, although a cursory examination of a great many "lizard" pots by the author has not produced such results.

Since the distribution of *cañanes* depends on the existence of algarrobo, it is likely that they were more widespread, and the custom of eating them more diffuse, in ancient than in modern Peru. The gradual deforestation of the valleys for agriculture has diminished the supply of *cañanes* (it will doubtless eventually bring an end to them), but they are still relatively abundant in the valleys of Chao and Virú and are also found in Moche, Chicama, and as far north as Piura. They may have been eaten in this last area, but people seem to have lost the habit, although we were told in 1948 by Don Julio Mariano Ganoza R., a Viruñero home from an extended residence in Piura, that the custom had been reintroduced there in the 1940's.

While the nutritive value of this small lizard has yet to be tested by science, the virtues attributed to it in Virú are formidable. These derive to some extent, at least, from the belief that the fruits of the algarrobo possess extraordinary alimentary and curative powers. This seems to be a general belief (probably of Spanish origin) in Peru, where algarrobina syrup is sold—especially in drug stores—for its tonic powers. Piura is famous for this product. Peruvian friends state that when they buy algarrobina syrup in

[1] Larco Hoyle (1938) mentions the use and portrayal of the large lizards locally known as iguanas, but not of *cañanes*. Gillin (1947) has called attention to *cañán* hunting in Moche and stated (p. 155) that ". . . eating of lizards and iguanas seems . . . to have been a Mochica trait . . . , as well as the *totora*-roll trap still used." We agree with Gillin on most counts but not on that of the *totora*-roll trap. *Cañán* traps—and we have seen many of them—are generally made of maguey; less often of *caña brava*. They are sometimes patched with *carrizo*, for lack of a better material, but we have never seen one of *totora*. This material is too flexible to be used for such a purpose.

a drug store, the vendor usually sells it with a smile, as if he were selling some remedy for the stimulation or restoration of sexual powers. Algarrobina cocktails are also famous as aphrodisiacs.

It is not uncommon in Virú to hear of such cases as the following, related to us by Don Julio Zoé Ganoza: One Novoa was dying of

FIG. 94. Mochica jar with painted decoration depicting a *cañán* eating algarrobo fruits. From collection of the Museum of Archaeology, University of Trujillo.

tuberculosis. He had had a number of hemorrhages and was so weak that he could hardly walk. Having tried everything else without success, and believing in the efficacy of algarrobo fruits, he began to eat them and nothing else. Soon he began to improve. Before long he became so robust that he was able to take up the occupation of a woodcutter, one of the most strenuous in the valley. In 1948 he was still in excellent health, cutting wood in the hacienda of Buena Vista in the valley of Chao.

Although the Viruñeros seldom eat the fruit of the algarrobo—not a tasty dish—its beneficial properties are transmitted to them by eating *cañanes*—a more tasty one. One of the principal rationalizations for the eating of *cañanes*, in fact, is that these reptiles live exclusively on algarrobo pods and are therefore clean; more important, however, is the belief that the meat possesses qualities that both stimulate and preserve the sexual powers. Especially large families, virility in old age, excessive sexual energy—this last demonstrated by the "possession" of several women—are frequently attributed to the eating of *cañanes*. One day, while recording genealogical data from Don Ernesto Garcia Pulido, a Viruñero of ancient vintage, we had occasion to remark that, judging from the size of families, the Viruñeros of days gone by were even more fecund than their heirs of today. Don Ernesto's comment on this remark epitomizes rather well the Viruñero's attitude towards *cañanes*. "What do you expect?" answered he, "there were more *cañanes* in those days."

Cañanes are usually caught in traps. These consist of long, low fences made from small, roughly rectangular staves of maguey (or sometimes of *caña brava*)—about 15 inches long, ½ inch wide, and ¼ inch thick—twined in a series with cotton string. A finished trap contains two rows of cotton wefts, one about 2 inches from the top and the other an equal distance from the bottom. Since the top and the bottom of a trap are alike, it is possible to use it with either end up. When rolled up, a trap has the appearance of a drum or *tambór* and so it is called in Virú.

To make a trap is not a difficult task, but it is a long and tedious one. The staves must first be cut from partially dried maguey trunks and thoroughly dried. Cured in this manner, they do not warp, are light in weight, and endure for long periods of time. Some 6,000 staves—the material of approximately 20 maguey trunks—go into the construction of a single *tambór* of about 100 meters, a standard length. When rolled up, such a *tambór* measures about a meter in diameter and weighs about 50 pounds.

Most hunters possess at least two *tambores*. These together constitute what is known in Virú as a *carga*. This literally means a cargo for a donkey—an indispensable animal in every *cañán* hunt, for, when going to or coming from the hunt, one *tambór* is tied to either side of the donkey (fig. 95). The *carga* (two *tambores*) thus rests on the animal like a pair of saddle bags (fig. 96).

Before setting out on a *cañán* hunt, a reconnaissance is made of the areas containing rich stands of algarrobo and a likely number

FIG. 95. Loading a pair of lizard traps on a donkey.

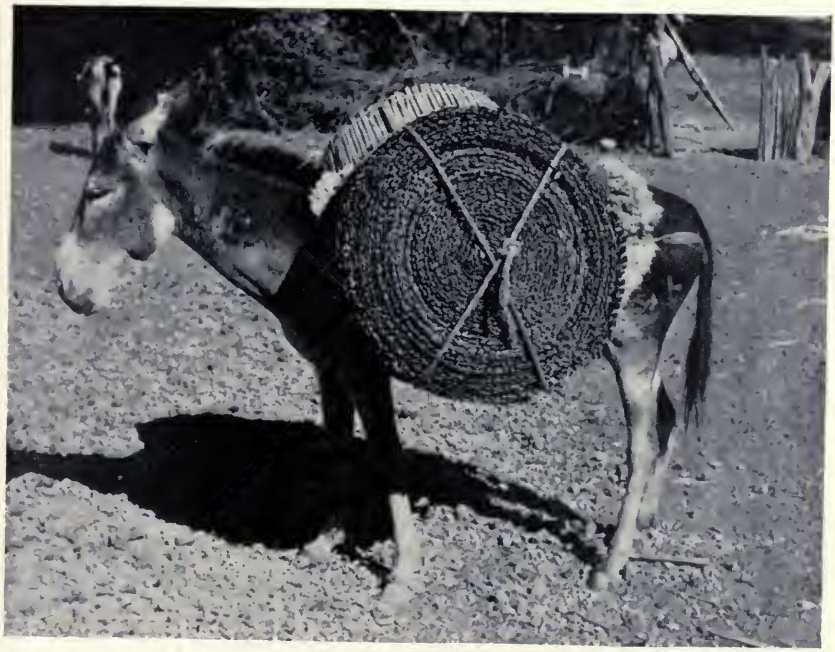

FIG. 96. Top view of a rolled-up lizard trap loaded on a donkey.

FIG. 97. Setting a lizard trap; Chao Valley.

of *cañán* holes. Once a good site has been selected, a day for the hunt is decided upon; usually it takes place the next day. Very early in the morning of this day, the hunter loads his donkey with a *carga* of traps and, often accompanied by his wife and children or friends, sets out for the site, planning to arrive there about daybreak so as to get his traps set several hours before the first *cañanes* leave their holes. If he arrives late, he is likely to have bad luck, for the *cañán* is a reptile sensitive to noise and may not leave its hole if there is much disturbance in the area.

FIG. 98. Banking sand on the inner side of a lizard trap; Chao Valley.

At the site, the traps are rolled out flat on the sand about a meter's distance from the low-lying algarrobo branches containing fruit. Then they are gradually set up—inclined slightly inward—and banked on the bottom (both inside and out) with sand (figs. 97, 98). A piece of broken gourd is sometimes used as a tool. The traps are arranged so as to follow the curvature of the algarrobo clusters and to enclose as large an open space as possible. The ends of the trap are hooked or curled inward, and against them the pieces of broken gourd used in banking up the trap are sometimes placed to prevent the *cañán's* escape around the ends. A *cañán* trap, when set up, thus presents the appearance of a miniature picket fence, inclining slightly inward and enclosing a large open space within which lie holes of *cañanes* and outside of which lie clusters of algar-

FIG. 99. A portion of a lizard trap sloping inward toward the holes of the *cañanes* and separating them from an algarrobo thicket; Chao Valley.

robo (figs. 99, 100). An entrance to the trap is always left open, so as to allow *cañanes* from the outside to enter the trap as well.

Once having set his traps, the hunter (sometimes accompanied by friends) retires to a shady spot nearby, where his donkey is tethered and where he can be neither seen nor heard by the *cañanes* near the trap. Before he can expect his first catch, he has several hours to wait, for these lizards do not make their appearance until the sun has well warmed their holes. If the day is sunny and warm, he may expect to make his first catch about 9 o'clock.

Meanwhile, the earliest-rising or hungriest *cañanes* have come out of their holes to eat. On their way, however, they encounter the barrier of the trap (fig. 101). Instead of returning to their holes, they continue to search for some avenue of escape to the algarrobo fruits, but everywhere they go they encounter the trap or its curled ends—a difficulty which their lack of intelligence does not permit

FIG. 100. A lizard trap set to follow the contours of the algarrobo clusters; Chao Valley.

FIG. 101. *Cañanes* caught in the trap; Chao Valley.

them to overcome. A number of *cañanes* may even have entered the trap through its open entrance way, but once inside, it does not occur to them to escape by the same route.

Having calculated that his trap contains *cañanes*, the hunter returns, approaching cautiously until he arrives at the entrance way, after which he begins to shout and throw chunks of wood into

FIG. 102. A *cañán* that has been picked up from the trap; Chao Valley.

FIG. 103. Breaking a *cañán's* back to prevent its escape; Chao Valley.

the open space so as to chase as many *cañanes* as possible to the edge of the trap. Even now, it does not occur to many of them to return to their holes, although a few, by trial and error, find haven in their own holes or those of others. A few large males (called *roñeros*), when startled, may even be able to jump over the trap, but the majority keep following the fence, looking for a means of escape which they never encounter. In this process they soon tire and can easily be caught by hand. It thus but remains for the hunter to gather up his *cañanes* (figs. 102, 103), break their front legs and backs—they are thus paralyzed but remain alive—and place them in a pair of woven saddle bags which he has brought along for this purpose (fig. 104). Having collected his catch, the hunter returns to his camp to wait for another, which can usually be made within an hour or two, when the process is repeated. On a lucky day, he may collect three or four catches before midday.

FIG. 104. A woman holding paralyzed *cañanes* which she collected from the trap and placed in her woven saddle bags; Chao Valley.

On one hunt, better than average in the valley of Chao, we and our *cañán* hunters from Virú collected about 130 *cañanes* in four catches made between 9 A.M. and noon; we were using four *tambores* or about 400 meters of trap. Since we were photographing and taking notes on the catch, however, many *cañanes* escaped. On an exceptional day, a hunter may even collect *cañanes* until 4 o'clock in the afternoon, but this is rare, since most of them return to their holes shortly after midday. If enough are gathered for a good feast, the hunter is usually satisfied. Having made his last catch, he rolls up his traps, loads his donkey, and returns home, usually late in the afternoon.

There still persists in Virú a considerable flavor of the *fiesta* in the *cañán* hunt. Until recent times, no Viruñero thought of dedicating all of his time to this pursuit or of making a living from it, but most of the hunters possessed traps which they occasionally set during the season to enjoy a day of *fiesta*—a day of picnic with family and friends. Today, however, a few skilled hunters have dedicated themselves to the hunt for commercial reasons, since there is an excellent market for *cañanes* both in the valley and in the neighboring cities, where they sold for as much as four soles a dozen in 1948. The true Viruñero, however, looks upon this activity with some displeasure, for he sees his already meager supply of *cañanes*—and therefore his *cañán fiesta*—rapidly disappearing. Those who hunted for commercial reasons in 1948 paid a fixed sum to the haciendas (particularly Carmelo and Buena Vista, which still possessed algarrobo forests in abundance) for hunting rights during an entire season. This sum varied from about 80 to 100 soles a season; one informant placed it as high as 300.

The lone hunter of *cañanes* generally brings home most of his catch (often alive), but when a *cañán* picnic or *fiesta*—including family and friends—is held, the feasting takes place near the site of the hunt. *Chicha* (maize beer), *camotes*, *yucas*, limes, condiments, and necessary cooking utensils are taken along to prepare the feast, which begins as soon as the first *cañanes* have been collected from the trap and continues intermittently throughout the day until the last *cañanes* have been caught. Before being prepared for special dishes, the *cañanes* are subjected to a treatment that probably derives from ancient times.

After being collected from the trap, the paralyzed *cañanes* are laid out in a row near the ashes of a dying fire. They are then grasped by their tails and thrown into the embers, where, wriggling for a moment or two, they are scorched to death (fig. 105). Next

FIG. 105. Lizards being scorched in hot ashes before they are scaled.

they are moved about in the hot ashes for about 30 seconds with an L-shaped club, not unlike a crude hockey stick in form. They are then removed (fig. 106), the purpose of this scorching having been to make easy the removal of the scaly outer skin, which is scraped off with the fingernails. A shallow depression in the hot sand is then dug with the L-shaped club and the *cañanes* are placed in it and covered with hot ashes. Here they are allowed to remain for about ten minutes, when they are regarded as "cooked." Finally, they are removed from the ashes and, once cool, are gutted (fig. 107).

FIG. 106. After the lizards have been scorched, they are raked from the ashes and scaled.

Cañanes subjected to the scorching and "cooking" treatment may be eaten as they are, may be prepared in various ways, or may be stored for as long as a year. They may even be eaten raw. Commonly, however, they are prepared in *seviches*, soups, stews, or omelets. On picnics, *seviches* and stews or ragouts seem to be the most popular dishes. The picnic feast is almost always "settled" with *chicha*.

Attention should be called to the fact that *cañanes* are sometimes, though rarely, caught by other means than traps. Gillin (1947, p. 26) mentions the traps used in Moche but he also states: "These are hunted by small boys, who kill them on the run with sticks." While granting that this may be possible, we doubt whether many *cañanes* could be caught by this method. In the first place, they spend most of their time underground; in the second place, they can run much faster than any human being; finally, they always have a ready means of escape, for they never wander far from the algar-

FIG. 107. Eviscerating lizards before they are cooked.

robo clusters where no human being can penetrate because of spines. More commonly, they are dug from their holes with spades and caught in the hands when trying to escape. This method, however, is rarely employed when traps are available, although it is sometimes resorted to during the winter months when *cañanes* do not leave their holes.

Cañán hunting also often goes hand in hand with woodcutting and charcoal-making. Since algarrobo is the best wood for the fire and for charcoal-making, and since *cañanes* live near clusters of this tree, the two activities are often carried out simultaneously. In periods of rest during a day of woodcutting or charcoal-making a man may collect *cañanes* from his traps; or, if accompanied by his wife, she may do most of the *cañán* hunting in connection with the household duties of cooking, carrying water, caring for children, etc. This combination seems to work out especially well in the valley of Chao, where fine algarrobo forests still remain and where families of Viruñeros often spend a couple of summer months

making charcoal and sustaining and diverting themselves by lizard hunts. In spite of many modern changes, this old custom is likely to persist for some time to come.

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